Tetra Tech EM Inc.

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September 19, 1997

SEP 2 5 1997

Mr. Michael Bellot
Remedial Project Manager
Remedial Response Unit No. 1
U.S. Environmental Protection Agency Region 5
77 West Jackson Boulevard
Chicago, IL 60604

Subject: **Field Oversight Summary No. 1**
Final Remedial Design Activities
Blackwell Forest Preserve Landfill, DuPage County, Illinois
Contract No. 68-W8-0084, Work Assignment No. 84-5P6Y

Dear Mr. Bellot:

On August 21 and 27 and September 3 and 11, 1997, Tetra Tech EM Inc. (Tetra Tech) conducted oversight of final remedial design activities at the Blackwell Forest Preserve Landfill in DuPage County, Illinois. The landfill is owned by the DuPage County Forest Preserve District (FPD). The activities that Tetra Tech oversaw consisted of repairs to the cap in Areas 3 and 5 and installion of a leachate collection system (LCS) between extraction wells EW-04 and EW-05. Envirocon, subcontractor to Montgomery Watson, which is a consultant to the FPD, and Envirocon's subcontractors, Art Lootens and Sons and RTE Environmental, conducted the cap repair and LCS installation activities.

Kevin Schnoes represented Tetra Tech onsite during the oversight period. A summary of Tetra Tech's oversight activities is enclosed. Appendix A of the enclosure contains photographs of site activities, and Appendix B contains Tetra Tech's field notes.

If you have any questions, please call Kevin Schnoes at (312) 856-8735 or Manoj Mishra at (312) 856-8721.

Sincerely,

Kevin Schnoes

for Kostas Dovantzis, Ph.D., P.E., D.E.E.
Site Manager

Enclosure

cc: Steve Nathan, EPA Project Officer (letter only)
Marguerite Hendrixson, EPA Contracting Officer (letter only)
Majid Chaudhry, Tetra Tech Program Manager (letter only)

ENCLOSURE

FIELD OVERSIGHT SUMMARY NO. 1
FINAL REMEDIAL DESIGN ACTIVITIES
BLACKWELL FOREST PRESERVE LANDFILL
DUPAGE COUNTY, ILLINOIS

(Four Pages)

FIELD OVERSIGHT SUMMARY NO. 1
FINAL REMEDIAL DESIGN ACTIVITIES
BLACKWELL FOREST PRESERVE LANDFILL
DUPAGE COUNTY, ILLINOIS

Tetra Tech Oversight Personnel: **Kevin Schnoes**
Reporting Period: **August 21 and 27 and September 3 and 11, 1997**

INTRODUCTION

The DuPage County Forest Preserve District (FPD) is conducting final remedial design activities at the Blackwell Forest Preserve Landfill site in DuPage County, Illinois, pursuant to a consent order signed by the FPD and the U.S. Environmental Protection Agency (EPA) on September 25, 1989. After the site's final listing on the National Priorities List (NPL), a remedial investigation/feasibility study (RI/FS) was performed. On March 7, 1996, an administrative order by consent (AOC) was signed by the FPD and EPA to address installation of extraction wells, design of a leachate collection system (LCS), a predesign investigation, and cap repair. Leachate extraction wells were installed at the site in June 1996, and the predesign investigation began in October 1996. In February 1997, Montgomery Watson, consultant to the FPD, submitted a work plan for final remedial design activities at the site. The activities discussed in the work plan include recapping of certain areas of the landfill and installation of an LCS. EPA subsequently approved the work plan.

Tetra Tech EM Inc. (Tetra Tech) conducted oversight of cap repair and LCS installation activities on August 21 and 27 and September 3 and 11, 1997. These activities were performed by Envirocon, subcontractor to Montgomery Watson, and Envirocon's subcontractors, Art Lootens and Sons (Lootens) and RTE Environmental (RTE). This report summarizes Tetra Tech's oversight observations and presents comments and problems, issues and developments, and future activities. Appendix A contains photographs of the cap repair and LCS installation activities, and Appendix B contains Tetra Tech's field notes.

OVERSIGHT OBSERVATIONS

Thursday, August 21, 1997

At 9:30 a.m., Kevin Schnoes of Tetra Tech arrived at the site and met with Jerry Hartwig of the FPD. Envirocon and Lootens were already at the site and had begun removing old cap material from Area 3 (see Photographs No. 1, 2, and 3). This material was transported to and stored at Area 4 (see Photographs No. 4 and 5). Mr. Hartwig stated that the FPD was having difficulty finding clay suitable for use as capping material in the areas that required recapping. At 11:30 a.m., Peter Vagt of Montgomery Watson arrived at the site. Mr. Vagt was informed of the site activities and of the difficulty in finding clay suitable for capping. At 1:55 p.m., Envirocon and Lootens began capping Area 3 with brown clay from a stockpile west of Area 3 (see Photographs No. 6 and 7). According to Envirocon, the stockpiled clay was tested and determined to be suitable for use as capping material. Area 3 had been surveyed before capping began and had been marked with stakes showing the 2-foot-minimum clay thickness needed to cap the area. Testing Service Corporation (TSC) arrived at the site at 2:10 p.m. to test the new clay cap in Area 3 in order to ensure that it met the required specifications. However, Envirocon stated that there would be no need for cap tests on August 21 because recapping of Area 3 had just begun. Envirocon told TSC to return on August 22 to test the clay cap, and TSC left the site at about 3:00 p.m.

Tetra Tech left the site at 4:00 p.m.

Wednesday, August 27, 1997

Kevin Schnoes of Tetra Tech arrived at the site at about 11:30 a.m. after receiving a message from Walter Buettner of Montgomery Watson stating that activities would be conducted at the site on August 27. Tetra Tech had attempted to contact Mr. Buettner on August 26 to determine whether activities would be conducted at the site on August 27; however, Mr. Buettner did not answer his telephone, and a message was left for him to inform Tetra Tech of the planned site activities.

When Tetra Tech arrived at the site, Areas 3 and 5 had been completely capped (see Photograph No. 8); Envirocon and Lootens had completed capping of these areas earlier in the week. Envirocon and Lootens were placing topsoil over the new clay cap in Areas 3 and 5 (see Photograph No. 9).

Area 5 lies adjacent to and west of Area 3. The ground surface of Area 3 had been contoured to promote surface water runoff toward a drain on the east side of Area 3 and ditch along the road north of Area 3. In addition, the old cap material removed from Area 3 and placed in Area 4 had been contoured to promote surface water runoff (see Photograph No. 10).

Tetra Tech left the site at 2:00 p.m.

Wednesday, September 3, 1997

Kevin Schnoes of Tetra Tech arrived at the site at about 10:30 a.m.; however, no activities were being conducted. On August 27, Mr. Schnoes had left his business card with the Envirocon field personnel and informed them to call him if no work was going to be performed onsite during the week of September 1. Mr. Schnoes did this because of the difficulty he had experienced in contacting Mr. Buettner of Montgomery Watson during the previous week to determine whether site work was going to be performed. Mr. Schnoes also checked his office voicemail for messages concerning the site, but, there was none. On September 3, the site appeared to be in the same condition as during the previous week except that Areas 3 and 5 had been completely covered with topsoil.

Tetra Tech left the site at 11:30 a.m.

Thursday, September 11, 1997

Kevin Schnoes of Tetra Tech arrived at the site at about 10:00 a.m. Envirocon and RTE were already at the site and had excavated the leachate conveyance trench between extraction wells EW-04 and EW-05 (see Photographs No. 11 through 15). EW-04 is located at the top of the landfill, and EW-05 is located about 200 feet east of EW-04 on the flank of the landfill. The bottom elevation of the trench was surveyed in various locations to ensure that it had at least a 2 percent slope as stated in the work plan. The trench contained four polyvinyl chloride (PVC) pipes. Three of the pipes were 2 inches in diameter and were for electrical lines, leachate conveyance, and compressed air; the fourth pipe was 6 inches in diameter and was for landfill gas conveyance. After the pipes had been placed in the trench, sand was placed around and above the pipes. The trench was filled with sand to a point about 6 inches above the pipes (see Photographs No. 16 through 18).

Tetra Tech left the site at 4:00 p.m.

COMMENTS AND PROBLEMS

Tetra Tech observed no significant problems or deficiencies during the reporting period.

ISSUES AND DEVELOPMENTS

Capping activities were discontinued after the recapping of Areas 3 and 5 because a suitable source of additional clay could not be found. The FPD plans to resume capping activities in spring 1998 after such a source is found.

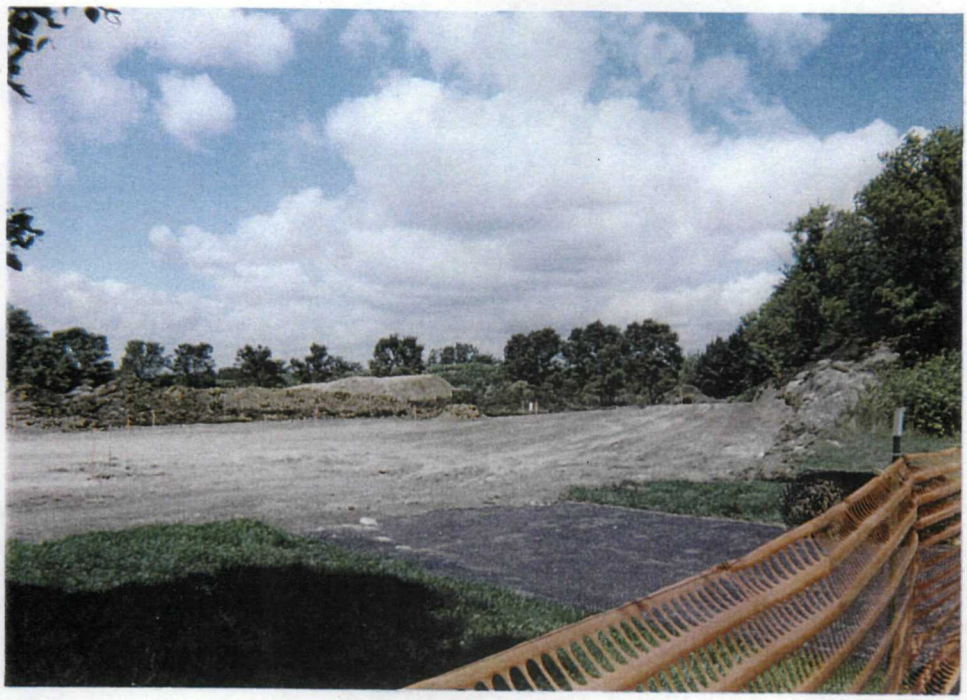
FUTURE ACTIVITIES

As directed by EPA, Tetra Tech will continue its oversight activities and provide EPA with field oversight summary reports.

APPENDIX A

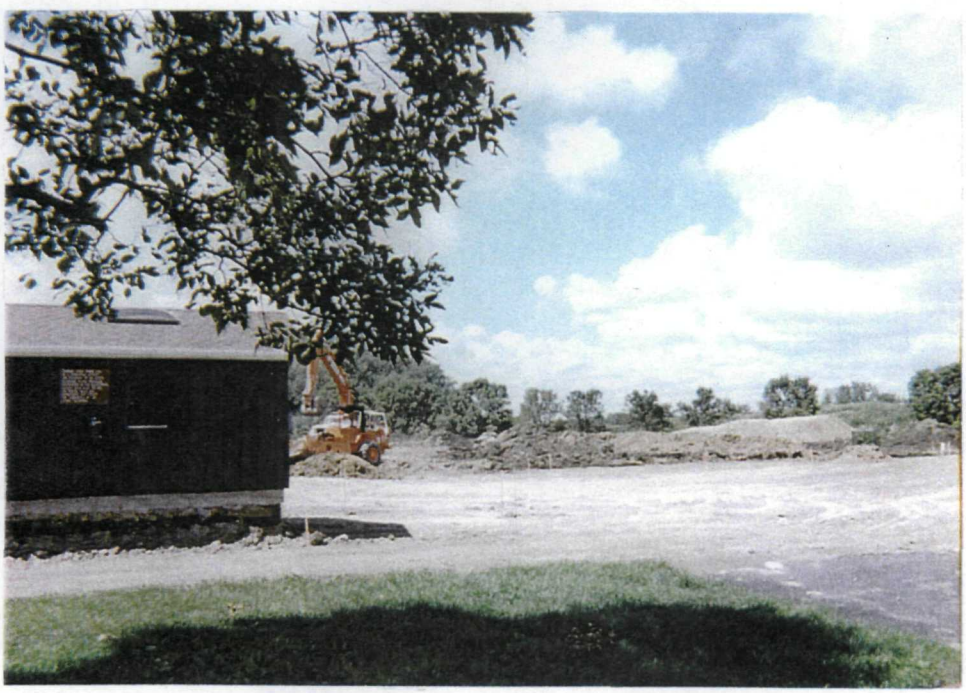
PHOTOGRAPHIC LOG

(10 Pages)



Photograph No. 1
Orientation: North
Description: Excavation of original cap at Area 3

Location: Area 3
Date: 08/21/97



Photograph No. 2
Orientation: Northwest
Description: Excavation of original cap at Area 3

Location: Area 3
Date: 08/21/97

Photograph No. 3 Location: Area 3
Orientation: North Date: 08/21/97
Description: Overview of Area 3 during excavation of original cap

Photograph No. 4 Location: Area 4
Orientation: Northwest Date: 08/21/97
Description: Portion of Area 4 used to store material excavated from Area 3; material has been contoured for surface water drainage

Photograph No. 5
Orientation: North
Description: Overview of excavation of Area 3 (right) and Area 4 (left)

Location: Area 4
Date: 08/21/97

Photograph No. 6
Orientation: West
Description: Capping of Area 3

Location: Area 3
Date: 08/21/97

Photograph No. 7 Location: Area 3
Orientation: West Date: 08/21/97
Description: Loading of soil stockpiled west of Area 3 for use in recapping Area 3

Photograph No. 8 Location: Area 3
Orientation: East Date: 08/27/97
Description: Area 3 after installation of new cap

Photograph No. 9 Location: Area 3
Orientation: North Date: 08/27/97
Description: Spreading of topsoil over Area 3 cap

Photograph No. 10 Location: Area 4
Orientation: West Date: 08/27/97
Description: Excavated material stored in Area 4 after it had been regraded and contoured to promote surface water runoff

Photograph No. 13 Location: Top of landfill
Orientation: West Date: 09/11/97
Description: Polyvinyl chloride pipes placed in leachate conveyance trench; three smaller pipes were 2 inches in diameter and were for electrical lines, leachate conveyance, and compressed air; large pipe was 6 inches in diameter and was for landfill gas conveyance

Photograph No. 14 Location: Top of landfill
Orientation: North Date: 09/11/97
Description: View of EW-04; pipes from leachate conveyance trench also visible; pipes had not yet been connected to the well

Photograph No. 15 Location: Top of landfill
Orientation: East Date: 09/11/97
Description: View of leachate conveyance trench from EW-04

Photograph No. 16 Location: Top of landfill
Orientation: West Date: 09/11/97
Description: Sand backfill being placed over pipes in leachate conveyance trench

Photograph No. 17 Location: Top of landfill
Orientation: West Date: 09/11/97
Description: Sand backfill being placed over pipes in leachate conveyance trench

Photograph No. 18 Location: Top of landfill
Orientation: East Date: 09/11/97
Description: Sand backfill being placed over pipes in leachate conveyance trench

APPENDIX B

FIELD NOTES

(Seven Sheets)

Field Logbook No. 1 Date 8/21/97

Cloudy, windy, 60s

0930 Kevin Schroer of Tetra Tech arrives @ Blackwell Landfill

Meet w/ Jerry Hartwig of Forest Preserve & Bill Wheatley of Envirocon (Contractors)

Area 3 excavation began last week. They are finishing up today. Enviocon then plans to start backfilling w/ clay however, Jerry said it has been difficult trying to find clay & that hopefully it will not delay the project.

Material excavated from Area 3 appears to be mostly clay. KS Enviocon is moving it to the Area 4/5 & storing it & actually capping part of Area 5

1045 Jim Sheffler w/ the Forest Preserve arrives @ the site. He will

K Schroer 8/21/97

Field Logbook No. _____ Date _____

be the main field manager for the Forest Preserve

1130 Peter Vagt of Montgomery Watson arrives at the site

Discuss the status of the project Jerry Hartwig informs Peter of the problem w/ the source of clay

Enviocon has found a couple sources of clay that will allow them to cap Area 1 & 2; however, the clay sources still have to be sampled to determine if they meet specifications

Jerry, Bill, & Peter discuss the possibility of using some of the material removed from Area 3 as cap material for the area. They are ~~going~~ KS storing it in Area 5 & also using it to

K. Schroer 8/21/97

Field Logbook No. _____ Date _____

Cap Area 5. Envirocon has been trying to segregate the course material from the clay in the Area 3 excavation & storing it in separate areas. Samples would have to be collected ~~before the~~ KS of the material stored in Area 5 before they use it to Cap Area 3

1200 Everyone breaks for lunch
1300 Back from lunch
Envirocon began excavating in Area 3 again

1335 Photo 1 (N) - excavated area of Area 3
1336 Photo 2 (NW) - KS Current excavation in Area 3
Light colored pile in background of photo is coarser material removed from the excavation

K. Schnoes 8/21/97

Field Logbook No. _____ Date _____

1345 Photo 3 (NW) - Section of Area 3 KS capped w/ material excavated from Area 3. Material consists mainly of clay. Steep slope to left (S) of photo

1345 Photo 4 (W) - Overview of Area 3 excavation

1355 Photo 5 (N) - Overview of Area 3 excavation + Area 4 KS capping. Photo taken from the top of the landfill

The contractors doing the actual excavation & capping are from Art Lootens

They are starting to bring in brown clay from west of Area 3 and capping Area 3. Stockpile of clay material located west of Area 3

1405 Photo 6 (W) - Capping of Area 3 excavated to the left removing topsoil

K. Schnoes 8/21/97

Field Logbook No. _____ Date _____

1410 Photo 7 (W) - Loading of stockpiled soil located west of Area 3. Soil used to cap Area 3

The surveyors have shown up & staked out Area 3. They stakes are marked to 2' so the proper amount of cap material can be placed

John McDonough of Montgomery Watson has also arrived at the site

Personnel from Testing Service Corp have arrived to collect samples and take tests of the cap material being placed in Area 3.

According to Enviroscan, the clay west of area 3 has been tested & is suitable for capping

K Schwarz 5/21/97

Field Logbook No. _____ Date _____

1500 TSC leaves the site. Enviroscan said they would not have enough clay installed today to test. They will return tomorrow

Enviroscan wants to cap east area of Area 3 just because it is lower & will collect water if it rains. This will also help drainage to manhole in the area

1600 Tetra Tech offsite

K Schwarz 8/21/97

Field Logbook No 1 Date 8/27/97

0900 Kevin Schnoes of Tetra Tech received a message from Walter Buettner of Montgomery Watson concerning activities at Blackwell Landfill. I KS ~~tried to~~ called Mr. Buettner yesterday to determine if any activities would be occurring at Blackwell but got his voice mail

ch his message, Mr. Buettner said that they had finished Capping Area 3 & had started on Area 5. ~~He~~ ~~he~~ also said that they plan to demobilize the capping activities & begin mobilizing for leachate activities.

1030 Leave for Blackwell site.

1130 Arrive at Blackwell. The workers here are on their lunch

K Schnoes 8/27/97

Field Logbook No. _____ Date _____

break.

Area 3 has been capped w/ clayey soil.

1140 Photo 8 (E) - Area 3 after it has been capped

Envirocon is currently placing topsoil on Area 3. They think they have enough clay onsite to finish Area 5. They also plan on regrading Area 4 since they do not have enough clay to cap it.

1330 Photo 9(N) - Area 3 after capping. Topsoil being spread in area. Area has been sloped for drainage. Light colored area is mound of soil that was knocked down to form berm or high area. Water will flow to west (left) & east (right)

K Schnoes 8/27/97

Field Logbook No. __________ Date __________

According to Jerry P
Envirocon, clay was placed
in 6" lifts. Testing Service
Corp (TSC) was here to do
compaction tests on lifts

1335 Photo 10 (W) Area 4 → appears
to be the same as last week

Envirocon plans to begin
leachate trenching on Thursday
of next week

The surveyors were also
reportedly here to confirm that
2' of clay had been placed
over the entire area

1500 Envirocon & Loolens continue
placing topsoil

Tetra Tech offsite

K. Schnoes 8/27/97

Field Logbook No. 1 Date 9/3/97

1030 Kevin Schnoes of Tetra Tech
arrives @ the Blackwell
landfill. There is no one
here conducting work. Last
week I left my card w/
Envirocon & told them to
call me if no work was going
to be done, but no one called.
I will wait to see if anyone
shows up. Areas 3 & 5 have been
completely covered w/ topsoil.

1100 Check my voice mail to see
if there are any messages
for me, but there are none.

1130 Return to office

K. Schnoes 9/3/97

Field Logbook No. 1 Date 9/11/97

1000 Kevin Schnoes of Tetra Tech arrives @ Blackwell Landfill

Jim Sheffler of the Forest Preserve is here installing a fence on the south side of Area 3

Workers are on top of landfill RTE Environmental has excavated leachate extraction well ~~point~~ KS-4 on top of landfill & line extending to the east

Photo 11(E) - Excavated leachate line extending to the east

Photo 12(W) - RTE excavated leachate ~~point~~ well on top of the landfill

K. Schnoes 9/11/97

Field Logbook No. _____ Date _____

Jerry P. of Environcon & John McDonough of Montgomery Watson are also here

Surveyors are here checking the grade of the leachate line

RTE is excavating trench & laying leachate line towards extraction well EW-05

1140 Jerry & John leave for lunch

1200 RTE leaves for lunch

1325 Jerry & John are not back yet

So far 4 pipes have been placed in the trench

3 2" dia PVC → gray has slotted lines, black + leachate + air

1 6" dia PVC → gas

Field Logbook No. _____ Date _____

1330 Photo 13 (W) - View of leachate conveyance line from LW 05. 4 pipes installed are evident

Photo 14 (N) - Extraction well EW-04. Pipes in trench have not yet been hooked up to well head.

Photo 15 (E) - View of leachate conveyance line from EW 04

1400 RTL placing sand backfill over pipes in trench

Photo 16 (W) - RTL placing backfill in trench by EW 04

Photo 17 (W) - RTL spreading sand over pipes in trench

Field Logbook No. _____ Date _____

Photo 18 (E) - Sand being spread in trench

1600 Tetra Tech offsite